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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,970	12/27/2000	Ralph M. Martin	RM393a	5888

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EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT PAPER NUMBER

3618

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/748,970

Applicant(s)
Martin et al.

Examiner
Vanaman

Art Unit
3618



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 28, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 9-11, 14-17, and 21-29 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-11, 16, 17, 21, and 24-29 is/are rejected.
- 7) ☒ Claim(s) 14, 15, 22, and 23 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 16 6) ☐ Other:

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2003 has been entered.
2. Claims 1-5, 9-11, 14-17 and 21-29 are pending, claims 21-29 having been added, claims 8 and 20 having been canceled

Claim Objections

3. Claims 21-25 are objected to because of the following informalities: These claims are duplicates of claims 2 and 14-17 either claims 2 and 14-17 or claims 21-25 should be canceled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 1, 3, 4, 9, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 11, absent any further structural or functional limitations, the recitation of a chamber powering a rod is confusing, in claim 1, line 12, the remote signal" lacks a clear antecedent basis; in claim 3, line 6; and claim 4, lines 6-8 the recitation of a chamber biasing a track or a connector is confusing, again absent any further limitations.

Claim Rejections - 35 USC § 103

5. The citation of the appropriate portions of 35 USC § 103 relied upon herein can be found in a previous office action.
6. Claims 1, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp (DE 2,402,684, cited previously) in view of Sittmann (DE 2,406,015, cited previously). Camp teaches a binding device for a ski (14) including a track comprising a flat rigid member (34, 28,

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16) which slides within a retaining device (32) having forward and rearward tab-shaped anchors for connection to the ski (see figures 2, 4; portion 34 of the track being located between the front and rear tab-shaped anchors of 32), the track receiving a ski binding member (12, 16), a remote transmitter (22) located within a ski pole (figure 5) and including both a main and safety switch (112, 96) wherein both switches must be engaged in order to operate the transmitter, a receiver (24) mountable on the ski and having an actuator (62) connected through a linkage to the track, the remote activation of the transmitter causing activation of the receiver to cause a movement of the track and lengthening of the distance between the heel and toe binding pieces. The reference of Camp fails to teach the actuator as including a gas chamber which includes a piston, the piston being biased by a spring to maintain a mounting distance and biased by a gas source to a release position. Sittmann teaches a fluid operated binding release mechanism (taught to be interchangeable with electric-operated systems-- see abstract lines 7-10), including a piston (371, 371a, b, c, etc.) which is biased by a spring (319) to a boot retaining position (end of 371 engaged with 314, 316) and which may be biased by a fluid (supplied through 375, 326a) to a release position. It would have been obvious to one of ordinary skill at the time of the invention to use a fluid powered release mechanism as taught by Sittmann to bias the track of Camp between mounting and release positions, wherein the application of a pressurized fluid is used to release the boot, for the purpose of allowing the boot release to be achieved with the use of less electric energy (thus conserving battery life, for example) than would be required by an all-electric release mechanism.

While the reference to Sittmann teaches a pressurized hydraulic fluid, rather than a pressurized gas, the use of a compressible gas is not deemed to be beyond the skill of the ordinary practitioner in view of Sittmann's already teaching the use of a hydraulic medium to actuate the release mechanism, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to use gas instead of hydraulic fluid for the purpose of using a medium which would be easily obtained and replaced by a consumer.

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7. The examiner apologizes for an error in interpretation concerning the subject matter of claims 2, 16 and 17.

8. Claims 2-5, 9-11, 21, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp in view of Sittmann and Spitaler (US 4,545,598, cited previously). The references of Camp and Sittmann are discussed above, and fail to teach the operation of the release mechanism as being characterized by a pressurized gas to maintain a mounting position, wherein the pressure is released by a plug, allowing a spring to bias the piston to a release position. Spitaler teaches a pressurized fluid binding mechanism wherein a spring-biased piston (6) and actuator (6B) is biased by a pressurized fluid in a retaining position, and wherein a plug (9A) is released to allow the release of the pressure (against working face 21) on the piston, the spring then urging the piston to a boot-release condition (see figure 1). It would have been obvious to one of ordinary skill at the time of the invention to reverse the operation of the piston and spring taught by the combined references of Camp and Sittmann, wherein the release of pressure in the fluid causes release of the boot, in order to insure that the boot can be released even if a further supply of pressurized fluid is unavailable.

As regards claim 11, while the references of Camp, Sittmann and Spitaler fail to specifically teach the heel piece, toe piece, track and actuator on a mounting plate with an aperture for attachment to a ski, the provision of a mounting plate with screw holes which carries an entire binding system is very old and well known, and as such, it would have been obvious to one of ordinary skill at the time of the invention to mount all binding elements on a single plate for the purpose of easily and quickly attaching and detaching the mechanism to and from the ski.

9. Claims 16, 17, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp in view of Sittmann, Spitaler and Wunder (US 3,528,672, cited previously). The references of Camp, Sittmann and Spitaler are discussed above, and fail to teach the use of a compressed gas cylinder in the form of a CO₂ cartridge. Wunder teaches the use of a compressed gas system for

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providing motive power to a ski boot release mechanism (e.g., figures 1 and 2) and further teaches that a compressed gas reservoir may be used (col. 4, lines 67-72) in place of a user operated pump or cushion. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a reservoir with a compressed gas as a source of motive fluid as taught by Wunder, for the purpose of allowing an easily obtained and replaced source to be used by the consumer. While Wunder fails to specifically teach a CO₂ cartridge and puncture mechanism. The examiner hereby takes Official Notice that CO₂ cartridges and accompanying puncture mechanisms are extremely old and well known in the field of providing small scale compressed gas systems with power, and as such, in view of Wunder teaching the use of a separate gas reservoir, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a commonly available and well known CO₂ cylinder source and puncture device in order to facilitate manufacture of the device, and to reduce construction costs by employing a commonly available mechanism.

Allowable Subject Matter

10. Claims 14, 15, 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is (703) 308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1113.

As of May 1, 2003, any response to this action should be mailed to:

Mail Stop ____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to :

(703) 305-3597 or 305-7687 (for formal communications intended for entry;
informal or draft communications may be faxed to the same number but should be
clearly labeled "UNOFFICIAL" or "DRAFT")

The Office has also established electronic fax servers for Technology Center 3600 as follows:

703-872-9326 (Official communications)
703-872-9327 (Official After Final communications)
703-872-9325 (Customer Service)

F. VANAMAN
Primary Examiner
Art Unit 3618

F. Vanaman
April 30, 2003



4/30/03